Testimony for Committee on Energy, Economic Development, and Tourism And Committee on Technology Tuesday, February 5, 2019, 2:50 p.m. Room 414

Senator Glenn Wakai, Chair Senator Brian T. Taniguchi, Vice Chair

Senator Jarrett Keohokalole, Chair Senator J. Kalani English, Vice Chari

SB272 Relating to Solar Energy Devices

Dear Chairs Wakai, Keohokalole and Members of the Committees:

This testimony is in SUPPORT of SB272 to amend the definition of "solar energy devices" to include building applied photovoltaics and building integrated photovoltaics for the multiple new buildings and some of the older buildings that at some point would look to have their glass exteriors replaced and have an option to provide energy for the buildings.

While it may not be feasible at the present time, this will change with new technology to move us toward utilizing the many options for electrical generation other than fossil fuels. Having this language included now, allows the older buildings to consider this when they are ready for replacement. And for new buildings, they can consider this as one more choice for their inclusion.

I live in Honolulu Tower, which is a glass enclosed building, and serve on the Board of Directors. We will be replacing the exterior windows in the next several years. This option is one more step toward green energy.

I humbly ask that you support SB272. Mahalo!

Me ke aloha pumehana With warm aloha,

Lynn P. McCrory 60 North Beretania Street #3203 Honolulu, HI 96817





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TESTIMONY OF THE HAWAII SOLAR ENERGY ASSOCIATION IN REGARD TO SB 272, RELATING TO SOLAR ENERGY DEVICES BEFORE THE SENATE COMMITTEE ON ENERGY, ECON. DEVELOPMENT, AND TOURISM AND SENATE COMMITTEE ON TECHNOLOGY ON TUESDAY, FEBRUARY 5, 2018

Chair Wakai, Chair Keohokalole, and members of the committee, my name is Will Giese, and I represent the Hawaii Solar Energy Association, Inc. (HSEA)

HSEA **offers comments SB 272.** The measure amends the definition of "solar energy devices" to include building-applied photovoltaics and building-integrated photovoltaics and clarify that the term excludes passive solar skylights or windows.

The HSEA was founded in 1977 to further solar energy and related arts, sciences and technologies with concern for the ecologic, social and economic fabric of the Hawaiian Islands. Our membership includes the vast majority of locally owned and operated solar installers, contractors, distributors, manufacturers, and inspectors across all islands.

It is unclear what purpose this bill serves by designating "building applied" and "building integrated" photovoltaics as two separate definitions. While we agree with the preamble of this measure that renewable energy has an "ever-evolving and innovative nature", separating out these two definitions seems unneeded and also leaves some aspects of solar energy technology out of the mix.

"Building Applied" and "Building Integrated" are somewhat of an exercise in semantics that may have adverse implications for certain technology' qualifications for incentives or rebates unless specifically noted. For instance, "building applied" in this bill refers to technology installed "to the outside of a building" while "building integrated" refers to technology installed and "integrated in the structural aspects of a building". Current residential PV installation might qualify as both of these definitions. Slope-mounted residential rooftop systems are installed on the outside of a building but are mounted and anchored to internal structures, such as rafters. Electricity producing PV windows, which are not commercially installed in Hawaii at this time, may or may not be considered a "structural component" of a building.

Furthermore, while this bill does include passive solar devices, or rather solar thermal devices that make use of the thermal aspect of a solar resource, such as skylights it does



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not include devices such a solar water heaters which utilize both thermal energy from solar (to heat water) and occasionally electricity from solar panels (to run DC pumps).

While the HSEA supports the intent of this bill and in creating succinct definitions within statute, the current form of this measure may overly complicate or obfuscate its intent to "further facilitate the development of 'green' projects throughout Hawai'i" without significant rework.

We **support the intent** HB 272 and we urge this committee to reexamine the wording of this measure before passing.

Thank you for the opportunity to testify.